

KVG-DH Series 500W 600W

Whole Family : KVG-XXXXX-DH 12V /24V /48VDC - [30W 60W 80W 96W 100W 120W 150W 200W 300W 500W 600W]



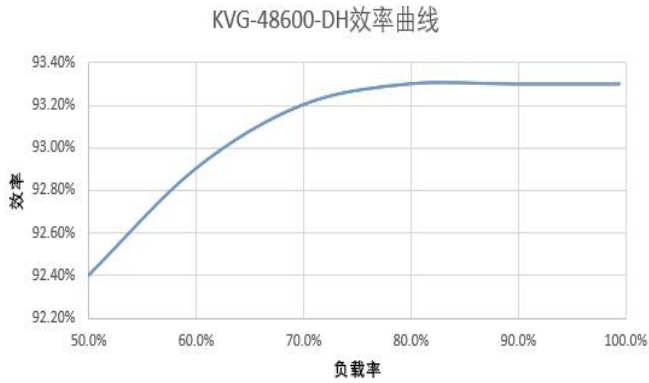
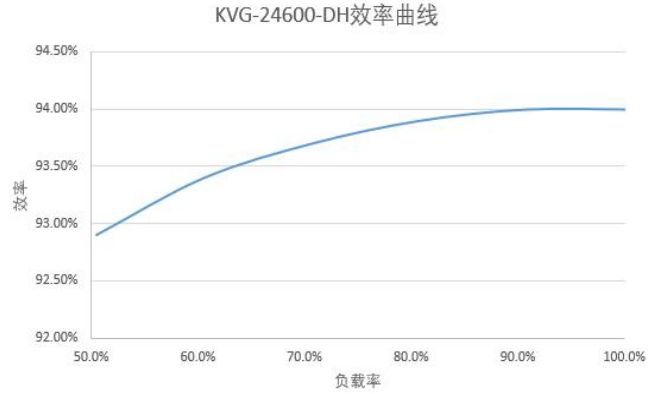
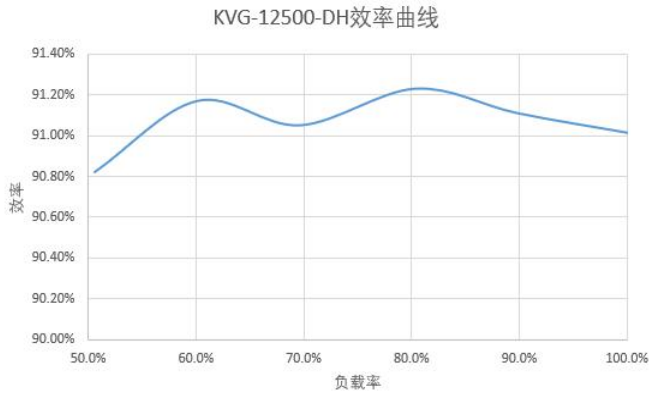
Features

Output:	Constant Voltage
Range:	200-240VAC
PFC design:	Built-in active PFC function
Efficiency:	Up to 87%
Protections:	Short circuit/ over load/ over temperature
Heat dissipation:	Cooling by free air convection
Waterproof performance:	IP66
Dimming function:	<u>Phase dimming</u> : work with leading edge, MLV and trailing edge, ELV, TRIAC dimmers. <u>0-10V dimming</u> : 0-10V/1-10V/Potentiometer/10V PWM 5 in 1
Dimming range:	0-100%
Application:	Suitable for LED lighting and moving sign applications
Warranty:	5 years warranty

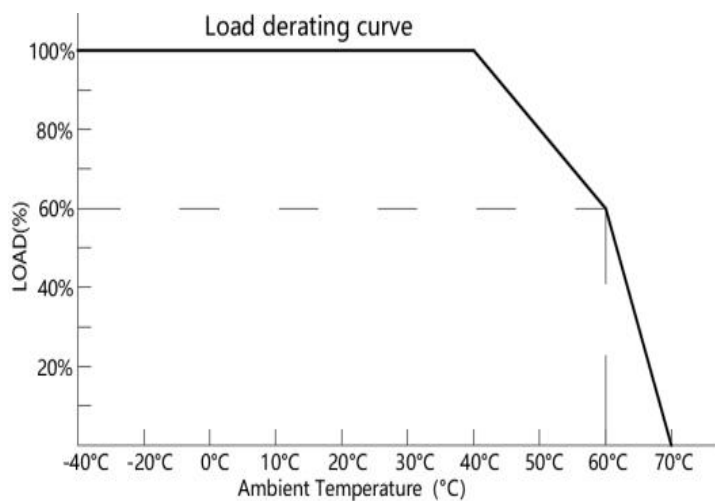
Specification

Model		KVG-12500-DH	KVG-24600-DH	KVG-48600-DH
Certificate		ENEC / CE / ROHS / Reach		
Output	DC Voltage	12V	24V	48V
	Voltage Tolerance	±0.5V		
	Voltage Regulation	≤0.6%	≤0.6%	≤0.5%
	Rated current	4.17A	12.5A	25A
	Rated power	500W	600W	
	Load Regulation	±1%		
Input	Voltage Range	200-240VAC		
	Frequency Range	47 - 63Hz		
	Power Factor @ full load	PF≥0.98		
	THD(Typ.) @ full load	≤10%@230VAC @full load		
	Efficiency @ full load	91%	93.5%	93%
	AC Current (Max.)	3.5A	4A	
	Inrush Current (Typ.)	98A,66us@50%Ipeak220VAC 58A,810us@50%Ipeak170VAC 76A,148us@50%Ipeak265VAC		
	Leakage current	<0.5mA		
Protection	Short Circuit	Hiccup mode, recovers automatically after fault condition is removed		
	Over Load	≤120% Hiccup mode, recovers automatically after fault condition is removed		
	Over temperature	Shell surface temp.100℃±10℃ shut down o/p voltage, automatically recover after cooling		
Environment	Working TEMP.	-40~+60℃ (see below derating curve)		
	Working Humidity	20 - 95%RH non-condensing		
	Storage TEM.,Humidity	-40 - +80℃,10 - 95% RH non-condensing		
	TEMP.coefficient	±0.03%/℃(0 - 50℃)		
	Vibration	10~500Hz, 5G 12min./1 cycle, period for 72min. each along X,Y,Z axes		
Safety & EMC	Safety standards	EN61347-1 EN61347-2-13 EN62493(EU)		
	Withstand voltage	I/P-O/P:3.75KVAC I/P-FG:1.88KVAC O/P-FG:0.5KVAC(EU)		
	Isolation resistance	I/P-O/P:100MΩ / 500VDC / 25℃ / 70%RH		
	EMC Emission	EN55015 EN61000-3-2 EN61000-3-3 (EU)		
Others	Net Weight	2.06Kg		
	Dimension	322*78*43.7mm(L*W*H)		
	Packing	415*360*190mm 10pcs /CTN		
Notes	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃of ambient temperature. 2. Tolerance: includes set up tolerance and load regulation .			

Efficiency Curve (efficiency vs output load)



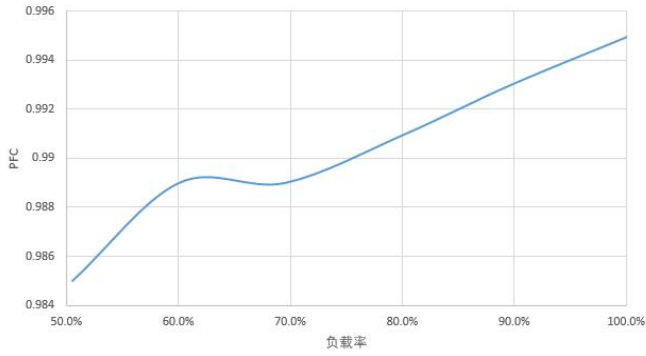
Derating Curve (output load vs TEMP.)



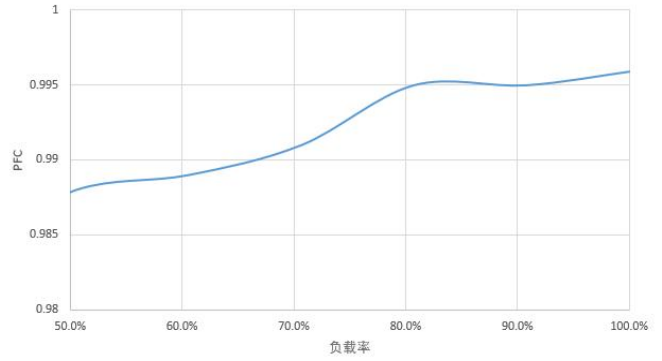
1. To extend their life, please refer to the Derating Curve and derate according to the temperature.
2. Please note that the rise in temperature of LED fixtures over a long period of time will cause their power to rise. Therefore, we recommend the power supply to reserve a certain amount of load to avoid overloading.

Power Factor Curve

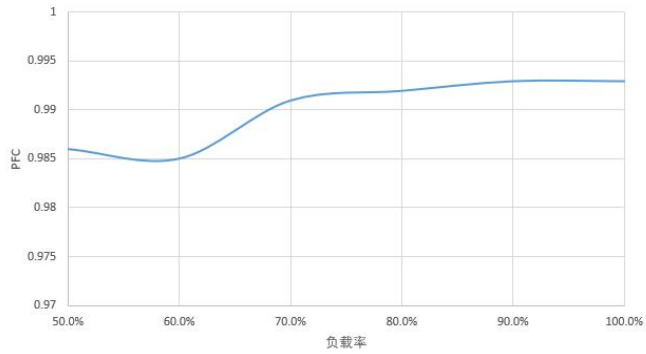
KVG-12500-DH PFC曲线



KVG-24600-DH PFC曲线

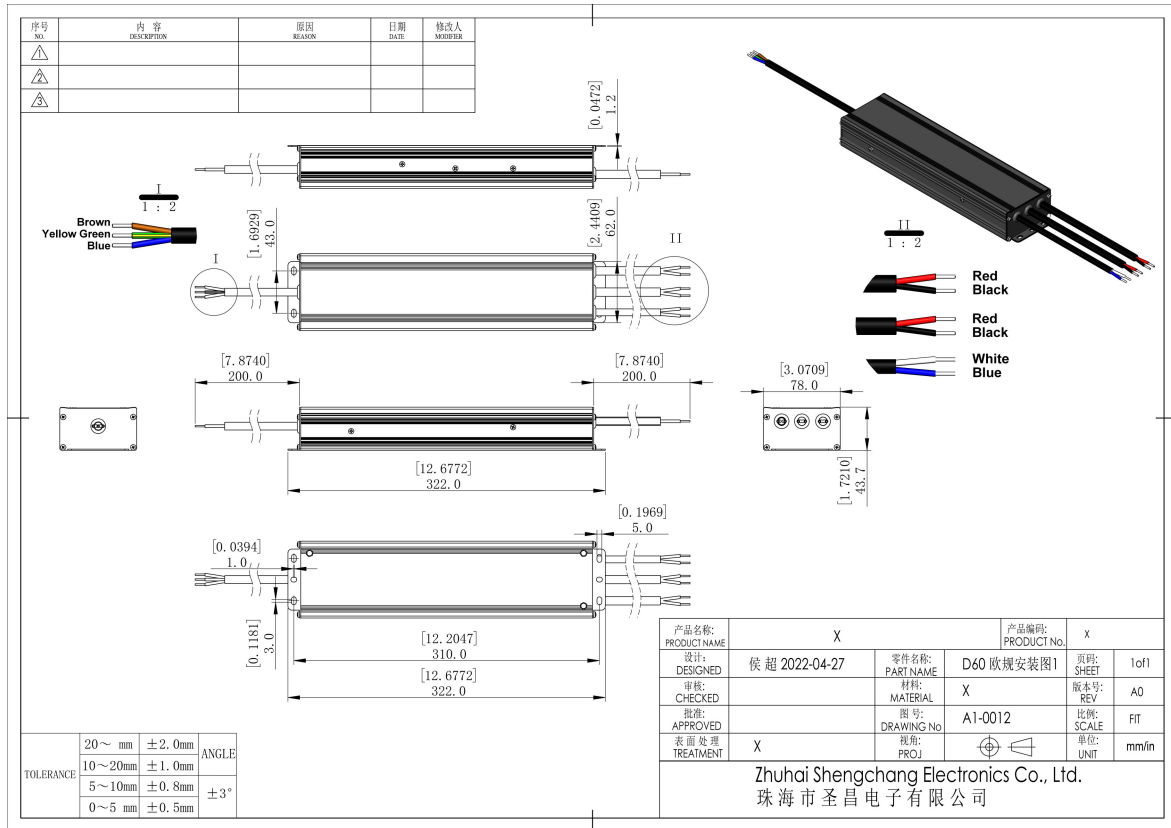


KVG-48600-DH PFC曲线



Triac/0-10V/1-10V/Potentiometer/10V PWM 5 in 1 Dimmable LED driver 500W 600W

Mechanical Specification



12V&24V&48V Version

- Input cable H05RN-F 3*1.0mm², the Green/Yellow cable to (FG), Brown cable to L, and Blue cable to N of Mains AC.
- Output cable SJOW 2*1.5mm², Red cable (+) to LED Positive side (+), Black cable (-) to LED Negative side (-).
Two groups of 12V&24V&48V.
- Dimming cable H05RN-F 2*0.75mm², DIM (+) Blue to 0/1-10V dimmer signal(+), DIM (-) white to 0/1-10V dimmer signal (-).
- Please DO NOT connect "DIM-" to "LED-", "DIM+" to "LED+", or other incorrect connection.
- Please make sure your connect these correctly otherwise your product will not function correctly and could be damaged.

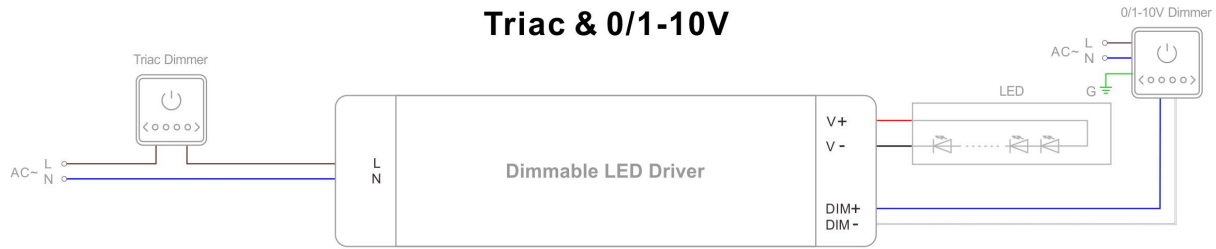
Warm tips:

- Suggested wire diameter: Input 0.75-2mm²; Output:0.5-2mm².
- Any other requests for, we can customized.
- Output wires each set of 16 AWG wires ,which can carry a maximum current of 13A.

Triac/0-10V/1-10V/Potentiometer/10V PWM 5 in 1 Dimmable LED driver 500W 600W

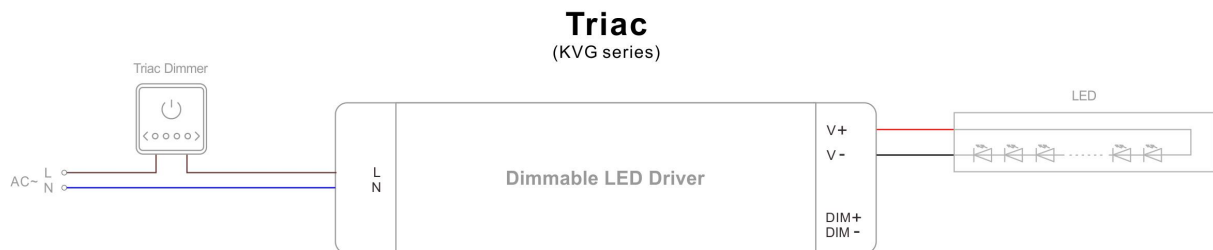
Dimming Operation and Connecting Diagram

- **Using two ways of dimming at the same time**, you must be assured that LED lighting is up to the max. Brightness then you could operate with the other dimming;

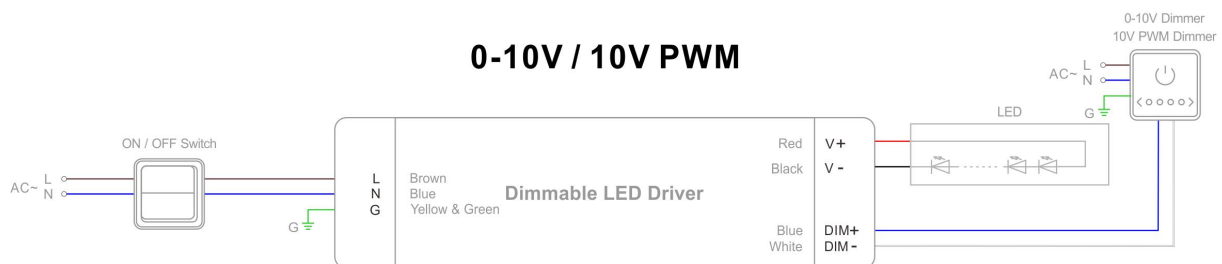


Using one dimming ---TRIAC/Phase cut dimming

1. The Pulse-Width Modulation (PWM) of output voltage can be adjusted through input terminal of the AC phase line(L) by connection a phase /Triac dimmer or lighting system.
2. Working with leading edge, MLV and trailing edge, ELV, TRIAC dimmers or light system.
3. Min. loading is about 10%.
4. Please try to use dimmers with power at least 1.5 times as the output power of the driver.

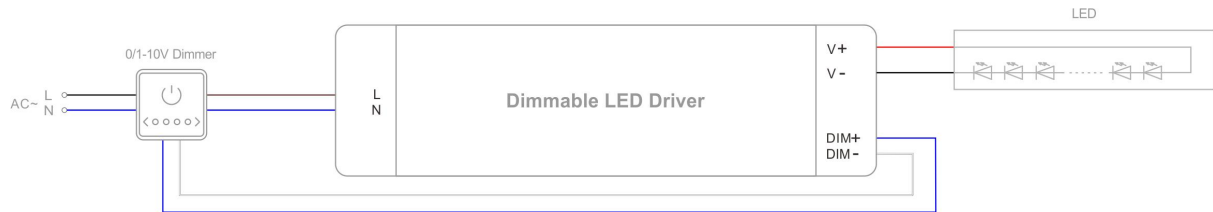


- **Using one dimming ---0-10/ 1-10V/ 10V PWM/ Potentiometer dimming**

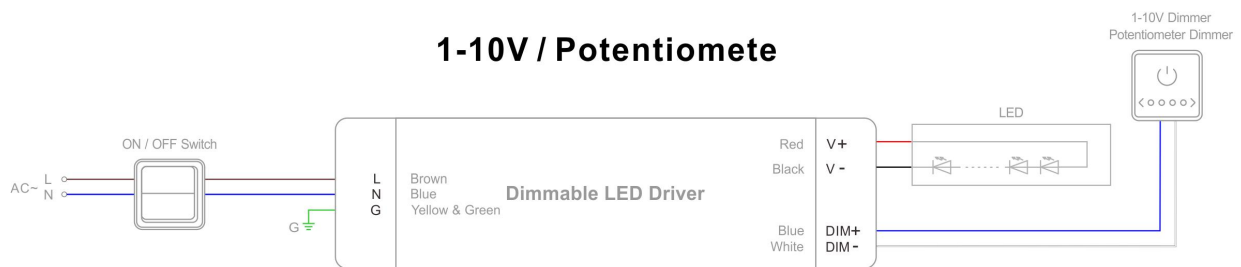


Triac/0-10V/1-10V/Potentiometer/10V PWM 5 in 1 Dimmable LED driver 500W 600W

0/1-10V



1-10V / Potentiometer



Instruction

1. This driver should be installed by qualified and professional person.
2. Please make sure the driver is installed with adequate ventilation around it to allow for heat dissipation.
3. Ensure that wiring is correct before test in order to avoid light and power supply damage.
4. If driver Cannot work normally, don't maintain privately.

Have any questions, please contact Zhuhai Shengchang.

Please visit our website or contact us for more information! www.scpower.net.cn/en